Amendments to the Claims

Please add Claims 53 and 54. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-41. (Cancelled)

42. (Previously Presented) A method for managing a signal, comprising:

searching for a pilot tone by scanning a frequency range in predetermined frequency steps;

recovering a pilot tone sub-symbol;

calculating a parameter value difference between the pilot tone sub-symbol and a consecutive pilot tone sub-symbol; and

adjusting a clock signal frequency depending on the parameter value difference to lock on a phase and frequency of the pilot tone.

43. (Previously Presented) The method of Claim 42, wherein recovering the pilot tone sub-symbol comprises adjusting the clock signal frequency so that the pilot tone sub-symbol can be received.

44. (Previously Presented) The method of Claim 42, further comprising identifying the pilot tone sub-symbol.

45. (Previously Presented) The method of Claim 44, wherein identifying the pilot tone sub-symbol comprises scanning a plurality of bins to locate a bin containing the pilot tone sub-symbol.

46. (Previously Presented) : The method of Claim 42, wherein the parameter comprises phase.

47. (Previously Presented) The method of Claim 42, further comprising using the clock signal frequency for phase locked loop processing.

48. (Previously Presented) An apparatus for managing a signal, comprising:

a search unit to search for a pilot tone by scanning a frequency range in predetermined frequency steps;

a clock source that recovers a pilot tone sub-symbol;

a calculator of a parameter value difference between the pilot tone sub-symbol and a consecutive pilot tone sub-symbol; and

an adjustor of a signal frequency of the clock source depending on the parameter value difference to lock on a phase and frequency of the pilot tone.

49. (Previously Presented) The apparatus of Claim 48, wherein the clock source is a voltage controlled oscillator.

50. (Previously Presented) The apparatus of Claim 48, further comprising an identifier of the pilot tone sub-symbol.

51. (Previously Presented) The apparatus of Claim 48, wherein the parameter comprises phase.

52. (Previously Presented) The apparatus of Claim 48, further comprising a phase locked loop processor that processes based on the signal frequency.

53. (New) The method of Claim 42 further including locking on the phase and frequency of the pilot tone as a function of adjusting a voltage controlled oscillator using a phase locked loop.

54. (New) The apparatus of Claim 48 further including a locking module arranged to lock on the phase and frequency of the pilot tone as a function of adjusting a voltage controlled oscillator using a phase locked loop.